

Attorney Docket Number	6454-56839-01
Application Number	10/039,940
Filing Date	October 26, 2001
First Named Inventor	Bowie G. Keefer et al.
Art Unit	1745
Examiner Name	Stephen J. Kalafut
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U.S. PATENT DOCUMENTS

Examiner's Initials*	Cite No. (optional)	Number	Publication Date	Name of Applicant or Patentee
QX_	3.1	3,094,569	18 June 1963	Thomas
5K		3,204,388	07 Sept 1965	Asker
OK]		3,430,418	04 Mar 1969	Wagner
		3,513,631	30 Dec 1968	Seibert et al.
The state of	11, t	3,564,816	06 May 1986	Batta
)K		3,594,984	27 July 1971	Toyama
*		4,144,037	13 Mar 1979	Armond et al.
KI		4,153,434	08 May 1979	Settlemyer
JKT.		4,272,265	09 June 1981	Snyder
X	4	1,322,394	30 Mar 1982	Mezey et al.
X	4	1,354,859	19 Oct 1982	Keller II et al.
K	4	,406,675	27 Sept 1983	Dangieri et al.
K	4	,452,612	05 June 1984	Mattia
K	4	,530,705	23 July 1985	Firey
[.	4,	587,114	06 May 1986	Hirai et al.
K	4,	696,682	122.5	Hirai et al.

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Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not in conformance and not considered. Include copy of this form with next communication to applicant.

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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U.S. PATENT DOCUMENTS

$\mathcal{O}($	4,702,903	27 Oct 1987	Keefer
OK	4,758,253	19 July 1988	Davidson et al.
Ot	4,917,711	17 April 1990	Xie et al.
5X	4,968,329	06 Nov 1990	Keefer
Sit	5,082,473	21 Jan 1992	Keefer
SK	5,096,469	17 Mar 1992	Keefer
OK	5,096,470	17 Mar 1992	Kirshnamurthy
5/K	5,133,784	28 July 1992	Boudet et al.
0 L	5,175,061	29 Dec 1992	Hildebrandt et al.
X	5,227,598	13 July 1993	Woodmansee et al.
X	5,246,676	21 Sept 1993	Hay
X	5,248,325	28 Sept 1993	Kagimoto et al.
/K	5,256,172	26 Oct 1993	Keefer
JK	5,256,174	26 Oct 1993	Kai et al.
K	5,271,916	21 Dec 1993	Vanderborgh et al.
	5,282,886	01 Feb 1994	Kobayashi et al.
X _	5,393,326	28 Feb 1995	Engler et al.
	5,429,665	04 July 1995	Botich

EXAMINER	00 1/11/10	
SIGNATURE:	DATE	11/16/04
* Examiner: Initial if reference	considered, whether or not in each	11/10/01

^{*} Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not in conformance and not considered. Include copy of this form with next communication to applicant.

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U.S. PATENT DOCUMENTS

5,431,716	11 July 1995	Ebbeson
5,441,559	15 Aug 1995	Petit et al.
5,487,775	30 Jan 1996	LaCava et al.
5,509,956	23 April 1996	Opperman et al.
5,529,763	25 June 1996	Peng et al.
5,529,970	25 June 1996	Peng
5,593,478	14 Jan 1997	Hill et al.
5,632,807	27 May 1997	Tomita et al.
5,646,305	08 July 1997	Wagner et al.
5,656,067	12 Aug 1997	Watson et al.
5,658,370	19 Aug 1997	Vigor et al.
5,766,311	16 June 1998	Ackley et al.
5,827,358	27 Oct 1998	Kulish et al.
5,876,486	02 Mar 1999	Steinwandel et al.
5,891,217	06 April 1999	Lemcoff et al.
5,958,109	28 Sept 1999	Fuderer
6,022,399	08 Feb 2000	Ertl et al.
1		
	5,441,559 5,487,775 5,509,956 5,529,763 5,529,970 5,593,478 5,632,807 5,646,305 5,656,067 5,658,370 5,766,311 5,827,358 5,876,486 5,891,217 5,958,109	5,441,559 15 Aug 1995 5,487,775 30 Jan 1996 5,509,956 23 April 1996 5,529,763 25 June 1996 5,529,970 25 June 1996 5,593,478 14 Jan 1997 5,632,807 27 May 1997 5,646,305 08 July 1997 5,656,067 12 Aug 1997 5,658,370 19 Aug 1997 5,766,311 16 June 1998 5,827,358 27 Oct 1998 5,876,486 02 Mar 1999 5,958,109 28 Sept 1999

EXAMINER SIGNATURE:	Kalff	DATE CONSIDERED:	11/16/04
* Examiner: Initial if reference cons	idered whether or and in		11/10/

^{*} Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not in conformance and not considered. Include copy of this form with next communication to applicant.



6454-56839-01
10/039,940
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Bowie G. Keefer et al.
1745
Stephen J. Kalafut

U.S. PATENT DOCUMENTS

			
OK	6,143,057	07 Nov 2000	Bülow et al.
0	6,162,5 3	19 Dec 2000	Borup et al.
OK.	6,200,365	13 Mar 2001	Eimer et al.
D(6,231,644	15 May 2001	Jain et al.
	6,293,998	25 Sept 2001	Dolan et al.
	6,296,823	02 Oct 2001	Ertl et al.
S)(6,398,853	04 June 2002	Keefer et al.
JK.	6,406,523	18 June 2002	Connor et al.
	6,692,545	17 Feb 2004	Gittleman et al.
	US 2001/0047824 A1	06 Dec 2001	Hill et al.
)(T	US 2002/0004157 A1	10 Jan 2002	Keefer et al.
30	US 2002/0098394 A1	25 July 2002	Keefer et al.
3K	US 2002/0104518 A1	08 Aug 2002	Keefer et al.
)K	US 2002/0112479 A1	22 Aug 2002	Keefer et al.
	US 2002/0127442 A1	12 Sept 2002	Connor et al.
K,	US 2003/0143448 A1	31 July 2003	Keefer
X	US 2003/0157390 A1	21 Aug 2003	Keefer
D	US 2004/0005492 A1	08 Jan 2004	Keefer et al.

EXAMINER	
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FOREIGN PATENT DOCUMENTS

Examiner's Initials*	Cite No.	Country	Country Number Publication Name			
mitials.	(optional)		Number	Date	Name of Applicant or Patentee	
W-		Europe	EP 0 143 537 A2	05 June 1985	Keefer Keefer	
		Europe	EP 0 143 537 B1	05 June 1985	Keefer	
		Europe	EP 0 737 648 A2	16 Oct 1996	Anand et al.	
OK		Europe	EP 0 750 361 A1	27 Dec 1996	Bellows et al.	
0		Europe	EP 0 853 967 A2	22 July 1998	Lemcoff et al.	
DK		Europe	EP 1 095 689 A1	02 May 2001	Monereau et al.	
nC		Japan	JP 62-278770	Mar 1987		
OK		United Kingdom	GB 2 042 365 A	24 Sept 1980	Smith	
)<		WIPO/PCT	WO 94/04249	03 Mar 1994	Schwartz	
SOLT		WIPO/PCT	WO 98/29182	09 July 1998	Keefer	
OK		WIPO/PCT	WO 99/28013	10 June 1999	Keefer et al.	
DK.	1	WIPO/PCT	WO 00/16425	23 Mar 2000	Keefer et al.	
OZT	7	WIPO/PCT	WO 00/16880	30 Mar 2000	Rehg et al.	
DE	7	WIPO/PCT	WO 00/76630	21 Dec 2000	Keefer et al.	
W.	V	WIPO/PCT ·	WO 02/24309	28 Mar 2002	Keefer et al.	
OK	V	VIPO/PCT	WO 02/35623	02 May 2002	Keefer et al.	
OL	V	VIPO/PCT	WO 02/056400	18 July 2002	Keefer et al.	

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	PRADEWARKS	,

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FOREIGN PATENT DOCUMENTS

Examiner's Initials*	Cite No. (optional)	Country	Number Number	Publication Date	Name of		
CYC		WIPO/PCT	WO 02/47797	20 June 2002	Applicant or Patentee Babicki et al.		
Examiner's Initials*	Cite No. (optional)		ОТН	ER DOCUMENTS			
DK			E J. 42(10):2765, 19	96 GETUBER)		
EK			Ding et al., Chemical Engineering Science 55:3461-3474, 2000				
6/F		Ding et al., Chemical Engineering Science 55:3461-3474, 2000 Ding et al., Chemical Engineering Science 55:3929-3940, 2000 Huffon et al., 41CLE LASCO 248					
&A		Hufton et al., AlChi		II > DINAUKI			
EK		Tyuke et al., Chemic	cal Engineering Scie	nce 55:4745-4755, 2	1000 (MG) WWWor		
r							

	DATE CONSIDERED:	11/16/	104	
* Examiner: Initial if reference considered what		-//		

^{*} Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not in conformance and not considered. Include copy of this form with next communication to applicant.

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	DOCUMENTS

Examiner's Initials*	Cite No. (optional)	Number	Publication Date	Name of Applicant or Patentee
00		5,360,679	01 Nov 1994	Buswell et al.
OK		5,998,056	07 Dec 1999	Divisek et al.
SIL		6,090,312	18 July 2000	Ziaka et al.

FOREIGN PATENT DOCUMENTS

Examiner's Initials*	Cite No. (optional)	Country	Number	Publication Date	Name of
SOF		Japan (Abstract)	JP 05-166528	02 July 1993	Applicant or Patentee Mitsubishi Electric Corp.
Examiner's Initials*	Cite No. (optional)		ОТІ	HER DOCUMENTS	
,					

	DATE CONSIDERED:	1/6/04
* Examiner: Initial if reference considered, whether or not in in conformance and not considered. Include copy of this fo	conformance with MPEP 609.	Draw line through cite if not applicant.

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